

CLAIMS

WHAT IS CLAIMED IS:

1. A connector system for sealingly connecting a tube to a fluid passage, said system comprising

a first body forming a housing with a first end and a second end, and an internal chamber connecting said first and second ends;

a sleeve slidably received in said chamber, said sleeve having a first end and a second end and said sleeve being adapted to receive said tube to be connected;

a spring positioned between said first body and said sleeve such that relative movement between said first body and said sleeve causes said spring to be energized;

a second body having a first end with a first opening in fluid communication with said fluid passage, a second end having a second opening, and an internal chamber in fluid communication with said first and second openings; and

interconnecting elements formed on each of said first body and said second body in order to selectively connect and disconnect said first and second bodies in a manner in which, in a connected state, said spring biases said tube against said second body to form a sealed fluid communication between said tube and said passage.

2. A system according to claim 1, further comprising

a visual indicating member distinguishing a connected position from a disconnected position.

3. A system according to claim 1, wherein

said sleeve includes a flange for seating a first end of said spring, and said housing includes an internal shoulder for seating another end of said spring, whereby relative movement of said sleeve toward said shoulder causes said spring to undergo compression and produce a biasing force therebetween.

4. A system according to claim 1, wherein

said interconnecting elements comprise a threaded female connection end on said first body and a threaded male connection end on said second body.

5. A system according to claim 1, wherein

said interconnecting elements comprise a threaded male connection end on said first body and a threaded female connection end on said second body.

6. A system according to claim 2, wherein

said visual indicating member comprises a mark on said sleeve that is visible when said first and second bodies are connected.

7. A connector system for sealingly connecting a plurality of tubes to a plurality of fluid passages, said system comprising

a plurality of primary bodies, each forming a housing with a first end and a second end, and each having an internal chamber connecting said first and second ends;

a plurality of sleeves, each slidably received in a corresponding one of said chambers, each said sleeve having a first end and a second end and each said sleeve being adapted to receive one of said tubes to be connected;

a plurality of springs, each positioned between one of said first bodies and a corresponding one of said sleeves such that relative movement between said first body and said sleeve causes said spring to be energized;

a plurality of second bodies, each having a first end with a first opening in fluid communication with a corresponding one of said fluid passages, a second end having a second opening, and an internal chamber in fluid communication with corresponding ones of said first and second openings; and

interconnecting elements formed on at least one of said first body and said second body in order to selectively connect and disconnect said first and second bodies in a

manner in which, in a connected state, said spring biases said tube against said second body to form a sealed fluid communication between said tube and said passage.

8. A system according to claim 8, wherein

said interconnecting elements comprise an expanding lock member having a removable key-like member adapted to selectively lock and release said interconnecting elements.

9. A system according to claim 1, wherein

said interconnecting member comprise a flange and a groove for selectively receiving said flange.

10. A connector system for sealingly connecting a tube to a fluid passage, said system comprising

a first body forming a housing with a first end and a second end, and an internal chamber connecting said first and second ends;

a sleeve slidably received in said chamber, said sleeve having a first end and a second end and said sleeve first end being adapted to attach to said tube to be connected such that said tube is in fluid communication with said sleeve;

a spring positioned between said first body and said sleeve such that relative movement between said first body and said sleeve causes said spring to be energized;

a second body having a first end with a first opening in fluid communication with said fluid passage, a second end having a second opening, and an internal chamber in fluid communication with said first and second openings; and

interconnecting elements formed on each of said first body and said second body in order to selectively connect and disconnect said first and second bodies in a manner in which, in a connected state, said spring biases said sleeve against said second body to form a sealed fluid communication between said tube, said sleeve, and said passage.